

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Withdrawn) A method of making a population of reverse-immortalised human olfactory ensheathing glia (OEG) cells, which have the ability to promote axonal regeneration from adult CNS neurons, for transplantation into a patient, which comprises:

- a) providing a sample of primary human OEG cells;
- b) immortalizing the OEG cells by transforming the OEG cells with a vector comprising a removable DNA segment containing an oncogene or combination of oncogenes, thereby producing immortalised OEG cells;
- c) growing the immortalised OEG cells;
- d) selecting those immortalised OEG clonal cell lines which maintain the property of promoting axonal regeneration from adult CNS neurons; and
- e) removing the DNA segment from the immortalised OEG cells, the removal resulting in the production of the population of reverse-immortalised human OEG cells, which have the ability to promote axonal regeneration from adult CNS neurons, for transplantation into the patient.

2. (Withdrawn) The method of claim 1, wherein the DNA segment is made removable by flanking it with recombinase target sites, and the removing is accomplished by introducing into the immortalised cells a gene that is expressed to produce a recombinase that specifically recognizes the recombinase target sites.

3. (Withdrawn) The method of claim 2, wherein the recombinase is Cre recombinase and the recombinase target sites are loxP sites.

4. (Withdrawn) The method of claim 1, wherein the oncogene is the gene encoding SV40 large T antigen, the gene encoding telomerase catalytic subunit, the gene encoding Bmi-1 protein or any combination of said oncogenes.

5. (Withdrawn) The method of claim 1, wherein the removable DNA segment further contains a suicide gene, which encodes a gene product that enables destruction of the immortalised cells by an exogenous agent if the removable DNA segment is not removed from the cells.

6. (Withdrawn) The method of claim 5, wherein the suicide gene is a gene encoding herpes simplex virus thymidine kinase, and the cells are destroyed by exposure to gancyclovir if the removable DNA segment is not removed from the cells.

7. (Currently Amended) A population of reverse-immortalised human OEG cells, which have the ability to promote axonal regeneration from adult CNS neurons, for transplantation into a patient, producible by ~~a the method of claim 5~~ which comprises:

- a) providing a sample of primary human OEG cells;
- b) immortalizing the OEG cells by transforming the OEG cells with a vector comprising a removable DNA segment containing an oncogene or combination of oncogenes, thereby producing immortalised OEG cells;
- c) growing the immortalised OEG cells;
- d) selecting those immortalised OEG clonal cell lines which maintain the property of promoting axonal regeneration from adult CNS neurons; and
- e) removing the DNA segment from the immortalised OEG cells, the removal resulting in the production of the population of reverse-immortalised human OEG cells, which have the ability to promote axonal regeneration from adult CNS neurons, for transplantation into the patient.

8. (Withdrawn) A method of treating a patient for neural damage, comprising transplanting into the patient a sufficient quantity of the reverse-immortalised human OEG cells of claim 7 to provide promotion of neuronal regeneration in the neuronal injured region of the patient.

9. (Withdrawn) A method of making a population of reverse-immortalised human OEG cells, which have the ability to promote axonal regeneration from adult CNS neurons, for transplanting into a patient, which comprises:

- a) providing a sample of primary human OEG cells;
- b) immortalizing the OEG cells by transforming the OEG cells with a vector comprising a removable DNA construct containing an oncogene or a combination of oncogenes, a selectable marker gene, and a gene encoding herpes simplex virus thymidine kinase, the genes together being flanked on either side by loxP sites;
- c) growing the immortalised human OEG cells;
- d) selecting those immortalised OEG clonal cell lines which maintain the property of promoting axonal regeneration from adult CNS neurons; and
- e) reversing the immortalization of the human OEG cells by removing the DNA construct from the immortalised OEG cells, the removing being accomplished by introducing into the immortalised OEG cells a gene encoding Cre recombinase to effect excision of the DNA construct at the loxP sites, the excision resulting in the production of the population of reverse-immortalised human OEG cells, which have the ability to promote axonal regeneration from adult CNS neurons for transplanting into a patient.

10. (Withdrawn) The method of claim 9, wherein the oncogene is the gene encoding SV40 large T antigen, the gene encoding telomerase catalytic subunit, the gene encoding Bmi-1 protein or any combination of said oncogenes.

11. (Currently Amended) A population of reverse-immortalised human OEG cells, which have the ability to promote axonal regeneration from adult CNS neurons, for transplantation into a patient, producible by ~~a the method of claim 9~~ which comprises:

- a) providing a sample of primary human OEG cells;
- b) immortalizing the OEG cells by transforming the OEG cells with a vector comprising a removable DNA construct containing an oncogene or a combination of oncogenes, a selectable marker gene, and a gene encoding herpes simplex virus thymidine kinase, the genes together being flanked on either side by loxP sites;
- c) growing the immortalised human OEG cells;
- d) selecting those immortalised OEG clonal cell lines which maintain the property of promoting axonal regeneration from adult CNS neurons; and
- e) reversing the immortalization of the human OEG cells by removing the DNA construct from the immortalised OEG cells, the removing being accomplished by introducing into the immortalised OEG cells a gene encoding Cre recombinase to effect excision of the DNA construct at the loxP sites, the excision resulting in the production of the population of reverse-immortalised human OEG cells, which have the ability to promote axonal regeneration from adult CNS neurons for transplanting into a patient.

12. (Withdrawn) A method of treating a patient for neural damage, comprising transplanting into the patient a sufficient quantity of the reverse-immortalised human OEG cells of claim 11 to provide promotion of neuronal regeneration in the neuronal injured region of the patient.

Claims 13-18 (Cancelled)

19. (Currently Amended) A reverse-immortalised human OEG cell, which has the ability to promote axonal regeneration from adult CNS neurons upon transplantation into a patient, produced by exposing ~~a the~~ DNA construct within ~~a the~~ reversibly-immortalised human

OEG cell of claim 13 to a recombinase that excises the DNA construct by cleavage at the recombinase target sites.

20. (Withdrawn) A method of treating a patient for neural damage, comprising transplanting into the patient a sufficient quantity of the reverse-immortalised human OEG cells of claim 19 to provide promotion of neuronal regeneration in the neuronal injured region of the patient.

21. (Withdrawn-amended) A cell library comprising a population of reverse-immortalised OEG human cells, which have the ability to promote axonal regeneration from adult CNS neurons, prepared according to ~~a the method of claim 1~~ which comprises:

- a) providing a sample of primary human OEG cells;
- b) immortalizing the OEG cells by transforming the OEG cells with a vector comprising a removable DNA segment containing an oncogene or combination of oncogenes, thereby producing immortalised OEG cells;
- c) growing the immortalised OEG cells;
- d) selecting those immortalised OEG clonal cell lines which maintain the property of promoting axonal regeneration from adult CNS neurons; and
- e) removing the DNA segment from the immortalised OEG cells, the removal resulting in the production of the population of reverse-immortalised human OEG cells, which have the ability to promote axonal regeneration from adult CNS neurons, for transplantation into the patient..

22. (Previously Presented) A reverse-immortalised human olfactory ensheathing glia (OEG) cell line, which has the ability to promote axonal regeneration from adult CNS neurons.

23. (Cancelled).

24. (Cancelled).

25. (Withdrawn) A pharmaceutical composition comprising a reverse-immortalised human OEG cell line as defined in claim 22, and a pharmaceutically acceptable carrier.

26. (Cancelled).

27. (Withdrawn-amended) A cell library comprising a collection of reverse-immortalised human OEG cells prepared according to a the method of claim 9 which comprises:

- a) providing a sample of primary human OEG cells;
- b) immortalizing the OEG cells by transforming the OEG cells with a vector comprising a removable DNA construct containing an oncogene or a combination of oncogenes, a selectable marker gene, and a gene encoding herpes simplex virus thymidine kinase, the genes together being flanked on either side by loxP sites;
- c) growing the immortalised human OEG cells;
- d) selecting those immortalised OEG clonal cell lines which maintain the property of promoting axonal regeneration from adult CNS neurons; and
- e) reversing the immortalization of the human OEG cells by removing the DNA construct from the immortalised OEG cells, the removing being accomplished by introducing into the immortalised OEG cells a gene encoding Cre recombinase to effect excision of the DNA construct at the loxP sites, the excision resulting in the production of the population of reverse-immortalised human OEG cells, which have the ability to promote axonal regeneration from adult CNS neurons for transplanting into a patient..

28. (Withdrawn) A method of treating a patient for neural damage, comprising transplanting into the patient a sufficient quantity of the reverse-immortalised human OEG cells of the cell line of claim 22 to provide promotion of neuronal regeneration in the neuronal injured region of the patient.

29. (Withdrawn) The method of claim 8, wherein the neuronal damage is traumatic lesions of the brain and spinal cord.

30. (Withdrawn) The method of claim 12, wherein the neuronal damage is traumatic lesions of the brain and spinal cord.

31. (Withdrawn) The method of claim 20, wherein the neuronal damage is traumatic lesions of the brain and spinal cord.

32. (Withdrawn) The method of claim 28, wherein the neuronal damage is traumatic lesions of the brain and spinal cord.

33. (Cancelled)

34. (New) The population of claim 7, wherein the DNA construct is made removable by flanking it with recombinase target sites, and the removing is accomplished by introducing into the immortalised cells a gene that is expressed to produce a recombinase that specifically recognizes the recombinase target sites.

35. (New) The population of claim 34, wherein the recombinase is Cre recombinase and the recombinase target sites are loxP sites.

36. (New) The population of claim 7, wherein the oncogene is the gene encoding SV40 large T antigen, the gene encoding telomerase catalytic subunit, the gene encoding Bmi-1 protein or any combination of said oncogenes.

37. (New) The population of claim 7, wherein the removable DNA construct further contains a suicide gene, which encodes a gene product that enables destruction of the immortalised cells by an exogenous agent if the removable DNA construct is not removed from the cells.

38. (New) The population of claim 37, wherein the suicide gene is a gene encoding herpes simplex virus thymidine kinase, and the cells are destroyed by exposure to gancyclovir if the removable DNA construct is not removed from the cells.

39. (New) The population of claim 11, wherein the oncogene is the gene encoding SV40 large T antigen, the gene encoding telomerase catalytic subunit, the gene encoding Bmi-1 protein or any combination of said oncogenes.